

SYSTEM FOR HANDLING MULTIPLE DISCRETE COSINE TRANSFORM MODES AND METHOD THEREOF

ABSTRACT OF THE DISCLOSURE

5 A system and methods are described for processing image data related to both 8-8 image data, corresponding to a single 8x8 image data set, and 2-4-8 image data, corresponding to two related 4x8 image data sets associated with different fields of an 8x8 image block. The image data is received and processed using separate discrete cosine transform (DCT) matrices. An 8-8 matrix processes the 8-8 image data and a 2-4-8 matrix processes the 2-4-8 image data. The matrices are used to generate forward DCT results when accessed in a normal fashion. The matrices are transposed through a column-major accessing scheme to generate inverse DCT results.